the SEED

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Volume 5 Number 3 March 1983 Price $1.50

MEMBERSHIP INFORMATION
$10 APPLICATION FEE AND $18 PER YEAR DUES

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##

From Our President

Well we are quickly approaching the elections meeting and I would like to invite all members to attend. It will be at the May general meeting. If you would like to run for any of the offices but are not sure what all is involved feel free to call any of the officers whose numbers appear on the front of the SEED. We would also like to form a nominating commitee to actively search for and get people who would like to run for any office. If you would like to be on such a commitee or you know someone who you feel should be an officer in the coming year please give me a call.

In an effort to help members to better care for there precious machines Louis Breyfogle has agreed to hold a short class on care and maintenance of disk drives. He will show how to clean the heads and adjust the speed on standard drives. The cost of this class will cover materials provided by Louis. More information will be available at the March General meeting or by calling Louis at the number on the front of the SEED. There will be a limit to the number who can attend but if there is enough interest we may repeat the class.

If anyone is interested in taking a 4 week course on programming in Applesoft I will offer such a class if there are at least 10 people who sign up. The course will cover BASIC programming, array handling, sorting techniques and disk file accessing. We will meet once a week for two hours. The charge will be $8.00 per person, bring your own hardware. I have offered similar classes to various businesses around my hometown for $15.00 and have had good response. I would like to see how this type of class goes over with the club. If anyone else is interested in teaching a class of this type in any of the languages of the Apple please contact me.

Arapahoe Community College is having a computer show in there student's center on March 4 and 5. We will have a booth there and if any of you are in the area please stop by and say hi. This will be local clubs and companies. Hours are 10am to 7pm Friday and 10am to 6pm Saterday.

As most of you with Modems are aware it is sometimes impossible to get on to any of the local BBS's. The board we have on UFONET is no exception and we are experiencing problems with people leaving programs and messages. For this reason we are looking into the possibility of starting a club BBS. If everything works out I will be running such a board from my home for a limited time to find out how much interest there is in it. I expect to announce a number and time begining in late March. If you have any comments please call me at my home phone. I will need help from anyone who is familar with the Apple-Cat Modem and BBS systems.

We will be having the board meeting on the 10th of March at the home of the Vitry's again. The address is 8338 Quay street. Call if you need directions.

One last note. I was contacted by the I.A.C. about a 2 day seminar to be held in California by Apple on the //e. They are inviting a member from most of the clubs to attend, at Apple's expense. We are sending Louis Breyfogle. We will be looking forward to what Louis learns while he is there. He has already assured us that he will give us a report at the General meeting as well as a column for the SEED. Rumor has it that these people may also get a look at the new LISA.

Steve Martin

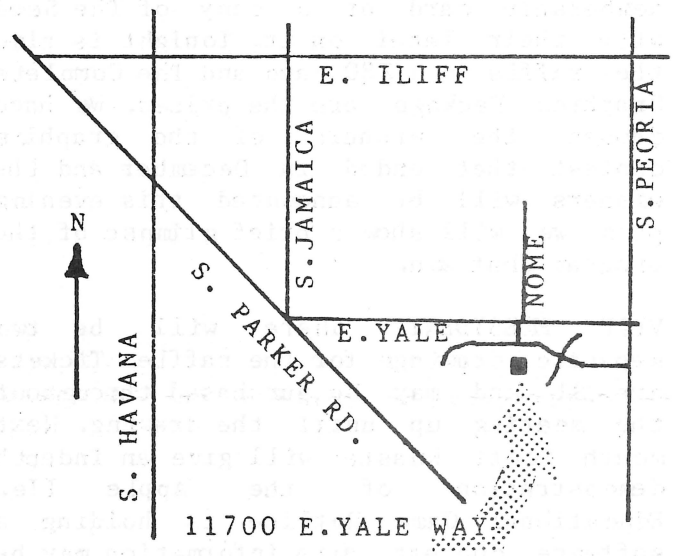
Apple Pi Benefits

1. Program library
2. Club buying power on supplies
3. Publication library
4. Monthly meetings
5. Newsletter
6. Member Forum

MARCH Swap Meet

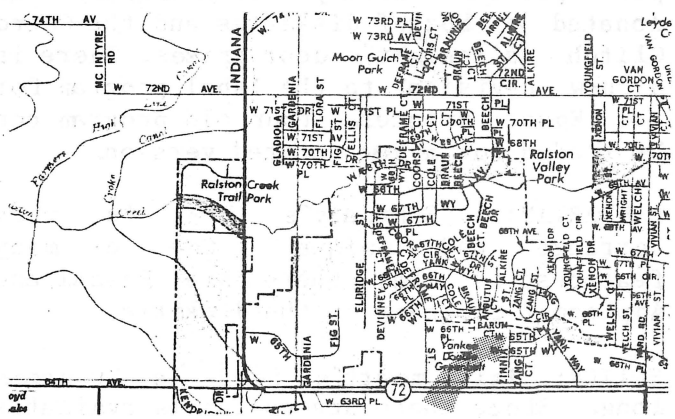
The March Swap Meet will be held on Sunday March 6 at the DAM WEST CLUBHOUSE, 11700 East Yale Way in Aurora. It will start at 10AM and end at 3PM as usual. Our host will be Al Tara, who may be reached at 755-8009 for further instructions if necessary.

PLEASE NOTE that Al will be in the Clubhouse during the Swap Meet. If you need information at that time the Clubhouse phone number 695-9739.



APRIL SWAP MEET

The April Swap Meet will be held on Sunday April 10. Our hosts will be John and Susan Robertshaw. The location will be 6623 Zinnia St. in Arvada.



TREASURER'S REPORT

Feb. Treasurer's Report		
Jan. Ending Bal.	5,389.23	
New Membership	906.00	
Renewals	234.00	
D.O.M. Sales	250.00	
Club Library Copying	166.00	
Advertising	370.00	
Sales of Supplies	4,128.50	
Interest Received	21.40	
Raffle tickets	264.00	
Misc.	.00	
Supplies for:		
President	< 1,007.67>	1.
Vice President	< .00>	
Secretary	< .00>	
Treasurer	< 10.00>	2.
Librarian	< 330.00>	3.
Editor	< 1,078.00>	4.
Officers at large	< 230.00>	5.
PURCHASE FOR RESALE	< 4,374.55>	
Balance as of 02/09/83	4,698.91	

1. $660.00 for lease payments on the meeting room Jan.-June. $297.67 for purchase of raffle prizes. $50.00 for best program prize.
2. $10.00 reimbursement to club member who overpayed on supplies
3. 200 diskettes
4. $349.00 for printing Jan. SEED. $579.00 for printing Feb. SEED. $150.00 for Feb. SEED postage.
5. 230 used diskettes saved for future D.O.M.'s

Respectfully submitted
Fred Yates -- Treasurer
February, 1983

ADVANCED BASIC GROUP: FEBRUARY SIG REPORT
by David Eisler

Interest in the Advanced Basic Group seems to have evaporated. Therefore no further meetings will be held.

DE

UPCOMING MEETING SCHEDULE

(subject to change)

by David Eisler, V.P.

MARCH
A demonstration of the APPLE //e by Scott Knaster.

APRIL
Business Applications.

MAY
Elections

DE

THANK YOU!

The Denver Apple Pi Users Group wishes to gratefully acknowledge the support of the following businesses that have purchased a business membership:

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Arvada, CO 80003
(303) 420-1877

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2422 S. Colorado Blvd.
Denver, CO 80222

BUSINESS COMPUTER SYSTEMS
13045 W. Alameda Parkway
Lakewood, CO 80228
(303) 988-9140

THE COMPUTER LINE
1136 S. Colorado Blvd.
Denver, CO 80222
(303) 758-3261

When you visit any of these stores, let them know that you are an Apple Pi member, and tell them you appreciate their support.

SECRETARY'S REPORT

Minutes of Meeting

APPLE PI USERS GROUP
FEBRUARY 3, 1983

The Apple Pi Users Group was called to order by President Steve Martin at the School of Mines, in the Green Center, Golden, Colorado.

PRESIDENT: Our main program tonight will be a demonstration by Russ Coffman of Compu-Home. Next month we are going to try selling before the meeting at around 6:30 p.m. Beginning in March, we would like to have members show their membership card or a copy of The Seed with their label on it. Tonight is also the raffle - a Z80 card and The Complete Graphics Package are the prizes. We have chosen the winners of the graphics contest that ended in December and the winners will be announced this evening plus we will show a brief glimpse of the program that won.

VICE PRESIDENT: There will be two separate drawings for the raffle. Tickets are $1 and may be purchased throughout the meeting up until the drawing. Next month Scott Knaster will give an indepth demonstration of the Apple IIe. Educational Game Hotline is holding a software contest. More information may be obtained by calling 800-221-4052.

TREASURER: A summary of monies being spent was given by the Treasurer. The Club now has a balance of $5,389. Other products will be offered at intermission tonight along with the regular merchandise. Used diskettes are available at $12 per 10. They will be limited to 30 per person. Binary Data Supply has donated a box of diskettes and the Guard Glitch as tonight's door prizes. There is a new revision to the label program for the Epson printer. Your old program can be traded for a new updated version.

LIBRARIAN: February's DOM is very "strange and unique." One of many features is that there are Pascal and Applesoft programs on the diskette.

EDITOR: This month's Seed is 20 pages long. Since there are no labels available at this time, please sign you name on the

sheet Frank Reeves has designated, when you pick up your Seed. Hopefully, this will eliminate duplicate mailings of the Seed.

OFFICER-AT-LARGE: The location of the Swap Meet is posted on the blackboard and also printed in the Seed. February's Swap is at the Nelson home this Sunday. In March, it will be at The Dam West. In April - in Arvada. At Lookout Mountain in May.

DEMONSTRATION: Craig Seastrom demonstrated his Fast Loader and Fast Copy program. Tonight's price will be $15. His program is a fast load for Integer using a DOS command. Currently he is working on a fast disk drive copy. Thank you for taking the time to show us your program, Craig.

OTHER: Mike Case is selling disk drives for $249.99. Printers, monitors, disk drives - get together with Steve Martin and let him know if you still want to purchase in bulk volume. He needs to know exactly how many people are interested before he can approach a distributor. Tonight's demo is about controlling your lights, heat, airconditioning, even hot tubs using your Apple. "TomorrowHouse controls your home." The Computer Fair is at the Denver Merchandise Mart. They do have a Lisa. Lots of software for sale. Anyone interested in joining a microcomputer club for Geologists - call Jerry at 355-4130.

GRAPHICS CONTEST WINNERS ARE TONY JEFFRIES AND PAUL HOFF.

BEST PROGRAM WINNER - KEVIN NELSON.

DOOR PRIZES: Box of BASF diskettes won by Kathy Turner. Glitch Guard by Dick Bergeron.

RAFFLE WINNERS
Complete Graphics System - Clark Roberts
Z80 card - Ed Schiffmacher

DEMONSTRATION: TomorrowHouse by Compu-Home. Russ Coffman presented a very educational program on how it is possible to control the environment in your home using your Apple. Some of the features were-knowing what the temperature currently is and has been in every room of your house. The Apple can also be set up to wake you in the morning with a greeting and the outside temperature. Mr. Coffman's program will also let you control the Apple while you are away enabling you to keep the house at various temperatures when you are not at home. It will even have your hot tub ready and waiting for you when you get home. Thank you for a very informative demonstration, Mr. Coffman.

MAV

Library Staff

APPLE PI USER'S GROUP DISK OF THE MONTH

#030 JAN 1983 DOM

DISP	EXEC1	APLE.ANM	ATEXT	
PUF #####	PUF.INSTR	PUF.OBJ	PUF.SOURC	RAM TEST SECTOR LI
TRACK 35	TRACK 35.	TRACK 35.	TRACK 35.	TRACK 35. BIRTH/ANN
DISPLAY A	DISPLAY A	DISPLAY A	JOYSTICK	JOYSTICK JOYSTICK.
JOYSTICK.	TEXT.JOYS	LOAN PROG	MEMAP (EX	DISK SECT ADDRESS I
ADDRESS I	ADDRESS I	CONVERT A	TEXT TO A	TEXT TO A POKE 33 #
POKE 33.1	POKE 33.0	POKE 33.0	POKE 33.5	UN-NEW ## UN-NEW.OB
UN-NEW.SO	LC-KILLER	LC-KILLER	LC-KILLER	

BOOT DOS 3.3 AND RUN APPLE PI HELLO

#031 FEB 1983 DOM

ADDRESS	SEARCH. ADDRESS	SEARCH.	
ADDRESS SEARCH.	ADDRESS SEARCH.	APPRINT	APPRINT FILE MA
BENCHMARK	CANYON RUN - CO	DISK FREE SPACE	DISKSCAN
DISKSCAN.OBJ1	DISKSCAN.OBJ2	ERROR HANDLER	FAST.LOADER
FAST.RWTS	FASTBOOT CREATE	GETFILE	GETFILE INFO
GETFILE.OBJ	GETSECT	GETSECT.OBJ	HELLO CRAE/APA
HYBRID HUFFIN	LAPLACE INVERSI	LAPLACE INVERSI	LISTING
LOWERCASE ASSEM	MENU MAGIC	MOONLANDING	MORSE CODE
MORSE CODE.OBJ	PRETTYPRINT	SHUFFLE	

APPLE
Boulder Computer Group meeting
March 7, 1983
at Main Library 7-9 p.m.

Questions? call

Ron.....441-3097

Kryptonite Kard Part 1

by Ron Abbott

As I'm writing this article I'm beginning to realize that it will probably take two (hopefully) consecutive articles to cover it properly. What I'm trying to cover is a new processor card for the Apple][called the Metacard. It is a 8088 processor with 64k of memory standard on the card.

My first look at the card shows it to be large, extending almost to the keyboard. A quick count shows 56 chips on the printed circuit board. 64k ram chips are used on this board and the standard 64k memory can be increased to 128k. Power consumption is of little concern with this procressor because the developers elected to use an external power supply. A very good design feature, given the very real limitations of Apple's power supply.

By the way, this is a working prototype, and as such, is prone to do some unexplained things occasionally. But not to worry as these glitches will be corrected before production units are shipped. To digress a moment, we at the "Seed" rarely get to report on new items, and almost never on preproduction products, but thanks to the people at Metamorphic Systems Inc. we'll get to out scoop the big guys at Byte, Creative Computing, Micro ect. Special thanks to Steve Welsh for making this card available to review.

Suggested retail price will be $ 980.00, for this you get 8088 processor running at 5mhz, 64k of memory with parity, external power supply, MS-dos operating system (this is the same operating system used on the IBM PC), and the p-system run time interpreter. CP/M 86 by Digital Research is also available for an additional $225. Documentation supplied to me is as follows: MetaCard System Operating Manual, Intel iAPX 88 Book, and the MS-dos Manual by Microsoft. The Microsoft manual is quite good and contains documentation on the assembler, debugger, editor, and other utilities, as well as the theory and operation of the operating system itself. Metamorphic supplies their own manual on the initial setup, cautions on do's, dont's and how to use send/receive a very handy utility. This set of programs supplied by Metamorphic are used to send and receive files bewteen a Apple][and an IBM PC computer. Apple][and IBM disk formats are different, and hence incompatible, translation: Apple won't read IBM disketts and IBM won't read Apple disketts. So with these send/receive programs you can transfer data and programs between the two computers via a cable. Realize that any program written on either the IBM or Apple][will run on either machine without modification PROVIDED that said program doesn't use any hardware dependant features. That means graphics and sound routines are not transportable between the two computers. A limitation yes, but not a servere one.

The System is supplied with a shift key modification, so that upper and lower case characters can be typed. Nice. The board itself nas a realtime clock, which will keep time and date while the machine is powered up. On booting up Ms-dos on the Metacard the data and time is requested, and typed in or disregarded. All subsequent file entries are data stamped and show up on doing a directory. This is a nice feature because it allows you to keep track of different versions of the same program. It would be nice if it had a battery backup so that time is kept accurately even when the computer is powered down.

I wanted to include benchmark tests running the 6502 (Apple processor), Z80 Microsoft card and the 8088 Metacard, but at the present time Metamorphic does not include any programming languages, or application software with card. So this part of the review must wait. When the p-code interpreter is released I'll be able to compile and run Pascal programs using the Apple's own 6502 and the 8088. As I said this is not yet ready so no benchmarks yet.

You can order your card from your local computer store or they have a toll free order phone number 1-800-228-8088 (catchy number!). It's my understanding that the

first production units will be shipping before Feb 15. Part 2 of this review will hopefully be in the next issue of the "Seed. Maybe we can get Metamorphic to give a demonstration of the card at a later meeting.

Reviewed by Ron Abbott

WARNING

If you are considering purchasing paper, forms, labels, etc. you may save yourself a lot of grief by avoiding Moore Business Center. Moore overpriced their product (which I didn't discover until later) and then billed me twice! Six phone calls with some ranted finally resolved the problem after only 6 months.
Their explanation: Computer Problems!

F.R.

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PRINTING WHILE YOU WATCH

Review: ASCII Express "The PRO"

Last month I did a review of the Com-Ware][terminal software package which is included with the Apple-Cat modem. This month I will look at ASCII Express "The Professional" by Southwestern Data Systems. The PRO has a list price of $129.95. This is advertised to be the most advanced program for telecommunications on the Apple. The PRO is currently compatible with all Modems, Printers and 80-column cards available for the Apple][.

The PRO comes with a 187 page manual which can send the most jaded Apple user reeling, however, if you are already familiar with telecommunications the first chapter will get you going. This system is like Visi-Calc, it will take you about four hours to learn and 4 weeks to master. But the advanced features are well worth learning about.

When the PRO is first booted up an installation program is run which allows the user to configure the program to his or her particular system. A main menu allows choices of setting up local terminal for various 80-column cards or standard 40 column display. Printer drivers can be added and selection of modem is done from this menu. Also several of the systems defaults can be changed.

After configuration is finished the PRO is run and actual communications can begin. There are not one but two menus used by the PRO. The first menu can be invoked by typing a "?" or a "1" at the prompt, the second menu can be invoked by typing a "2" at the prompt. The menus are merely reminders of the commands which can be used with the PRO as all commands can be invoked at any time from the prompt. The commands that would be expected with any terminal software are found here, such as Baud rate selection and Dialing a system. I will skip over the usual features and concentrate on the "extras" available on the PRO.

As with most systems the PRO can store incoming data in the Apple's memory to be

saved too disk later. However, many host computers use a control-R to tell the terminal to save data and control-T to tell it too stop saving data. The PRO recognizes these characters and turns on and off its copy buffer automatically. Also the PRO can be configured to automatically save data to disk when the buffer is full or data transmission is finished. The PRO also supports data transfers by special protocol with another Apple using a PRO package. This method does various error checking routines to insure accuracy of the transmission.

Dialing can be done directly by the PRO if your modem supports direct connect with dialing. The last number dialed can be redialed by typing a "/" instead of a number. Also the PRO will dial a specific number of times when you type "/#", where # is the number you wish, or indefinitely by typing "//". In both of these redial modes the PRO will ring the Apple's "bell" when a connection has been made, thus you can catch up on reading your favorite computer magazine while the PRO takes care of redialing a very busy number. This feature becomes even more powerful with the addition of the PRO's Macro capabilities.

The PRO also has a built in editor which can be invoked with the "Y" command. This editor is line oriented and has several powerful features such as Global find/replace and special cursor movement and editing modes. The editor uses the same buffer as the Copy buffer so you can recieve a file, go to the editor, edit the data and send it to another host without any special intermediate steps.

Undoubtedly one of the most powerful features of the PRO is its Macros. These allow the user to define special sequences of commands to be sent to the host with the touch of two keys. When a Macro is defined the phone number of the host the Macro is for is also stored so dialing can be done by typing "m" instead of the whole number. When the number is dialed this way the user may request that one of the Macros for this host be automaticly invoked when connection is made so that the PRO performs all of the steps required to logon to the system. It is possible with the conditional Macros of the PRO to set up a file that would dial a host, log on to it, retrieve specific files to the Apple's memory, save those files to disk and log off of the host without the user ever having to touch the machine! This is impressive but I must say that there is one piece of terminal software available for the Apple that goes one step further: Transcend by SSM. Transcend uses a clock card in the Apple to wait until a predetermined time to carry out a Macro chain, making for virtually operator free data transfers. As of yet the PRO does not support clock cards though I imagine that this will soon be remedied by Southwestern Data Systems.

An interesting feature of the PRO is the unattended answer mode. Although other systems allow the Apple to be left on line so that data can be transferred from a remote system, I know of no other system which uses a Password to insure that only authorized users call in.

Lastly is a feature which is transparent to the user but not the least important. The PRO utilizes interupts if your modem supports them. This means that the PRO can send data to a printer, place data from the keyboard into a buffer and recieve data from the modem simultaneously without loosing a byte.

Of the terminal software packages I have seen around I believe that Southwestern Data Systems ASCII Express The Professional is the most powerful. If you are serious about telecommunications with your Apple you would be wise to see what this package has to offer. There are two sister packages: "P-Term" for the Pascal operating system and "Z-Term" for CP/M users. These three packages are all similiar in there operation and give the greatest flexibility for the Apple user that I have seen.

Steven Martin

APPLESEEDS OF WISDOM

by Jack D. Quinn

Another month has rolled around again and I am back at the Apple keyboard for another issue of the Seed. This month I would like to discuss how your Apple talks to other things such as a printer and a Modem. I will assume that most of you either have a printer or at least are thinking of buying one. The Apple II or the //e do not have a plug that you can directly connect to your printer. You must have some type of interface card that goes into Slot 1 of your Apple. But, before you know what kind of card you need, you must know what kind of signal your particular printer wants. Most printers sold today will require either a serial input known as RS-232 or a parallel input often known as a Centronics input. A short discussion of the difference between serial and parallel data might help you understand what is going on here.

When your computer is sending data to a printer in a serial format, what is happening is the computer is sending each of the bits that make up each letter (there are 8 bits per character) one at a time in sequence to the printer. There are also 2 other bits being sent, 1 bit as a start pulse and 1 as an end or stop pulse for a total of 10 bits for every character printed. When a computer talks to a printer in the parallel format, it sends the 8 bits that make up a character all at the same time over 8 different wires to the printer. You might think that sending parallel data to a printer might be faster (and it usually is) but you are still limited by how fast your printer can print no matter how it communicates with your computer.

Until the introduction of the Apple //e, there was a good rule of thumb that if your cable connector on your printer had 25 pins (in 2 rows-1 with 12 pins and the other with 13) that you had a serial printer. You usually had a parallel printer if the plug on the back of the printer had 36 pins in 2 rows of 18 pins each. Another good way to tell what kind of communications your printer uses is by the number of wires involved in the cable. Serial (or RS-232) takes a minimum of 3 wires but can take as many as 8 for full communications between a computer and a printer. Parallel communications usually has a minimum of 10 wires in the cable but 14 or more are quite common. (Eight lines are used for data, 1 as a strobe to tell the printer that the data lines are ready, 1 as a ground, and the rest of the wires for such things as to select a particular printer, paper or ribbon out, cover open, etc.) There is a price to pay for having all these functions and that is a short cable between the printer and computer, usually a maximum of about 6 feet. Cables longer than 6 feet are subject to noise and will cause the printer to say all kinds of strange things. Serial printers can have cables up to 100 feet between the computer and printer if the proper wire is used.

The most common printer used with the Apple is one of the Epson family of printers such as the MX-80. This printer has a parallel input (all Epsons do) and requires that you use a parallel card in your Apple. You have to buy this in addition to the price of the printer. The lowest price is about $85.00 and can be over $250.00! These cards determine how easy you can do graphics on your printer. Cards at the low price end require you to load a software program to dump the high-res screen while cards in the middle price range (about $175) such as the Grappler+ allow you to dump the screen by typing in a few control codes. Cards such as the Wizard BPO will allow you to dump graphics with control codes as well as having a buffer to store text while the printer is working. I am sure that many of you have been in the situation of not being able to use your computer while the printer was working on a long print out of a program listing. A printer buffer can help you out of this problem. What happens is the buffer card stores the data sent to the printer in its own memory (rather than in the computers memory) and in turn sends it out to the printer as the printer requests it. The buffer can be anything from 8K up to a

full 64K or even more in some models. I have been using a Microspooler by Consolink Corp. of Longmont CO during the past week and found it a very interesting device. This spooler is different in that it goes in the cable between the Interface card in the Apple and the printer so that you don't lo se your investment in the things that you already have purchased. A spooler will not speed up the printing of reports where the printer is having to wait on the computer to make its calculations before sending an output to the printer. A good example of this would be with some of the General Ledger and Inventory programs where most of the time is spent in doing calculations.

As I said before, most printers require parallel inputs but there are times that you do need to have a serial input. A good example of this would be if the printer was required to be more than 10 feet from the computer or if you were trying to use a printer that was used with another computer or shared among many users. In this case, you would use an Apple Super Serial card or a CCS 7710 serial card. You may or may not be able to dump graphics with these cards. An Epson printer can be equipped with a serial card which plugs inside the printer case which will allow it to be used as a serial input device. An example of this would be an Apple III computer which has only a serial output which you need to connect to an Epson printer. Another case might be where you needed to use a Modem and a printer but only had one card for your Apple. In this sutuation, you would buy a serial card for the Apple and then use it for driving your D. C. Hayes Smartmodem and your serial printer.

If you do not buy a D. C. Hayes Micromodem II which plugs into slot 2 of your Apple, you will probably have to buy a serial card to put into your Apple since I know of no Modem that takes a parallel input (data only goes one way in a parallel interface). Well, I hope that I don't have you all confused about printer inputs now but I know I sure am!

JDQ

APPLE PI USER'S GROUP LIBRARY INFORMATION

The APPLE PI LIBRARY contains over 5,000 programs and files on over 250 diskettes in over 30 catagories. All of these programs are Public Domain programs which are either original efforts by members, modifications of programs listed in magazines or Newsletters for the APPLE II Computer, or programs obtained through trades with other clubs. Some of the programs that we have were copyrighted after they were given to us and so we are free to trade them with APPLE PI members only (and not even with other APPLE Computers Clubs). Please honor these commitments. Therefore the APPLE PI LIBRARY is not supposed to contain copyrighted programs; if you spot a copytrighted version of a program, please let us know so that we can remove it. This is one reason you must be careful in giving us programs in exchange.

The APPLE PI LIBRARY is open to all members of APPLE PI. There are several ways you can contribute to or obtain copies from the Library:

1). By coming to the Monthly SWAP MEET (usually on the First Sunday after the General Meeting).

2). By Written Request to the Librarian at the monthly General Meeting.

3). By Written Request to the Librarian by Mail.

4). By Appointment with Dr. Brown at the School of Mines (279-0300. Ext. 2434).

The Library is available at the SWAP MEETS. Every Member should have a listing of most of the programs in the yellow book "THE APPLE PI LIBRARY LISTING" (New Members receive them free when they join). Additional or Replacement Listings are no longer available. New LIBRARY LISTINGS will appear sometime next year. An Almost Up-to-Date Listing is available at the Swap Meets.

The cost to you for the copy of a side of programs is $1.00 and a blank disk. Almost all programs in our Library are in the process of being converted from DOS 3.2 to DOS 3.3. Disks no longer need to be initialized for our copy program. We will no longer grant access to anyone to remove Diskettes from our Library to test them out to see if the programs on the Disk are wanted. The $1.00 fee was made low enough for anyone to get these programs to try them out. We will also avoid people destroying Disks. Since we have been copying over 150 Diskettes during an average SWAP MEET we ask that you:

1). LABEL EACH SIDE WITH THE CATAGORY AND DISKETTE NUMBER (i.e. BU 001 Business). All good Diskettes come with Labels!

2). Copy Fee of $1.00 per Disk side.

3). Punched Diskettes if you wish to copy both sides of Diskette.

4). BY MAIL we need: Your Name, Address, and phone number.

5). Instructions on how the Disk is to be returned. If by mail, be sure to include a self-addressed stamped envelope and Floppy Armor or $2.00 to cover shipping costs.

The APPLE PI LIBRARY is only open to members of APPLE PI. These are programs that are obtained by your expense and effort. Please urge your friends to join also to add to this support. At the low cost of $1.00 per Disk side, none of these programs are beyond the reach of people. Besides the low $1.00 cost of a Disk full of Programs is one of the lowest of Apple Clubs in the Nation. We would not like to raise this fee. Many clubs do not even allow access of their programs to Members of their clubs except in the form of Disks of the Month. And most Clubs charge $7.00 for them!

If you have found a)) BUG ((in one of our Programs please note the circumstances, Line Number and Type of Error. If you fix a)) BUG ((in a program we will give you another Disk Side FREE when you give us a "FIXED" copy of the program.

Hope to see you at the next Swap Meet.

Robert C. Gaiser, Librarian

HARDWARE REVIEW

I recently purchased a 16K Ramboard Kit for $50 (plus $7.45 Freight) from Consumer Computers Mail Order in La Mesa, CA 92041. When assembling the board (2) Ram chips were found to be defective. Additionally, the required LS chips were missing! A couple of calls to the supplier resulted in receiving the parts. The board works fine but I understand they have discontinued the kit because of customer difficulties. They are selling the assembled and tested Con Comp version, however.

Frank Reeves

ARTICLE FORMAT

For the moment, we would appreciate your submitting your articles in machine readable form. This implies that you give us a disk with one of the following on it:

3.3 DOS TEXT FILE (Apple Writer][)
3.3 DOS BINARY FILE (Apple Writer I)
APPLE PASCAL EDITOR FILE
3.3 DOS MAGIC WINDOW BINARY FILE

Your disk will be returned to you promptly. Be sure that you give us a label telling what you are giving us.

We are printing much of this issue with a Diablo using a Prestige Elite 12 pitch daisywheel, a column width of 3.5 inches (42 characters), and 56 lines per column. It is our intent to print program listings in 80 character widths. Diagrams and sketches will be dealt with on an individual basis - they do not necessarily have to be furnished camera ready, but we do need to be able to understand them!

SEED ADVERTISING RATES

$20 ¼ Page
$35 ½ Page
$60 Full Page

SEED UNCLASSIFIED ADS

Editor-in-Chief

GUIDELINES FOR SUBMISSION: Column width is 3¼ inches. Camera ready copy is requested. No business names are allowed, this service is free to individual members only.

Wanted: used APPLE at reasonable price. Computer does not have to be in working order. Also interested in Integer Card.

Call Frank.....499-2192

FOR SALE: Texas Instruments Silent 700 Printer with paper.(RS-232).....$550

FOR SALE OR TRADE:
I have a LOBO Disk II Interface Card, with both DOS 3.2 and 3.3 on the board. Will sell for $75.00(new) or accept a DOS 3.2 APPLE Disk II Interface Card in partial trade.

FOR SALE: 3 X 5 Index Cards continuous, set-up for tractor feed. These are usefull for MailingLists, resceipts, etc.....$10 for 500

4
4 X 6 Cards (U.S.Postal Service Approved.)..$10 for 366
Call Frank.....499-2192

TYPESETTING FROM YOUR OWN COMPUTER
Professional photo typesetting from your word processor text files. Can receive ASCII files via MODEM. For further information call Frank 499-2192

Before I owned my
APPLE Computer I DRANK
SMOKED and USED FOUL
LANQUAGE!
for no reason at all.

BUT THANKS TO MY COMPUTER
I NOW HAVE A REASON!
Frank Reeves, Editor

Hardware Review

KRAFT PRECISION JOYSTICK - PRODUCT REVIEW

By Mike Kramer

If you were a well known radio control manufacturer and wanted to get into the personal computer business, what would you produce? If you said joysticks you would be 100% correct. Kraft, long known as a maker of quality radio control gear, has introduced a joystick that combines good looks with a list of features that are equalled by few (if any) others.

Kraft's joystick features a self-centering mechanism which can be converted to non-centering whenever desired by flipping a pair of recessed switches on the bottom of the case. A pair of trim pots permit easy adjustment of either the X or Y axis, a feature essential for those who like the cursor to be centered when the stick is centered. The trimpots on the unit tested permitted a range of 71 to 162 counts on the X axis and 69 to 152 on the Y axis with the centering mechanism engaged. If the trimpots are significantly off center, it is possible to open the case and center them with a little time and the proper tools. When playing Choplifter, it is possible to adjust the trim so that the chopper hovers when the stick is released or settles slowly to a safe landing. The mechanism operates smoothly over the full range without jitter and is able to get into every corner of the graphics screen. This should permit record high scores when playing ABM, Sneakers, or Falcons. Two flush firing buttons are provided, one on the horizontal surface and one on the face of the case away from the user. The operation of these two buttons is also very smooth.

The only feature of the joystick that may be hard to become accustomed to is the positioning of the pushbutton on the vertical face of the case. This is strictly a matter of personal preference, however, and I will probably get used to it. It should also be pointed out that the plug, a high quality Augat type with machined pins, will be susceptible to pin breakage so caution should be used when plugging or unplugging it. The plug can be protected by tying a knot in the cable on the inside of the Apple's cabinet to avoid damage from an accidental yank.
The joystick is available locally with a list price of about $70 and is warranted for a full year to be free from defects in materials and workmanship.

The Kraft Joystick is highly recommended.

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